# BLACKJACK/BLUEBIRD MINE PROJECT INITIATION OF CERCLA INVESTIGATION MEMORANDUM

#### I. PURPOSE

A release, or threat of a release, of hazardous substances, pollutants or contaminants that potentially pose a threat to public health or welfare or the environment, has occurred or may occur at the Blackjack and Bluebird Mine sites (the Site) on and/or from lands under the jurisdiction, custody, or control of the USDA Forest Service, Umatilla National Forest (National Forest System or NFS lands).

The purpose of this Action Memorandum is to document, pursuant to the Guidelines of the National Oil and Hazardous Substance Contingency Plan (NCP), 40 CFR 300, et seq., the decision to initiate a CERCLA investigation, and such further CERCLA actions as may be subsequently determined appropriate, as authorized by Section 104 (42 USC 9604) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA; 42 USC 9601 et seq.), and Executive Order 12580, 52 Federal Register 2923-26 (January 23, 1987).

### II. SITE CONDITIONS AND BACKGROUND

#### A. Site Location and Historical Activities

The Blackjack and Bluebird mines have been combined into one project because of being located within one-mile of each other, being located in the same watershed, and other similar characteristics. The project will be known as Blackjack/Bluebird Project and it is anticipated the USDA Forest Service will be able to save dollars for the public by combining both sites.

#### 1. Blackjack Mine

The Blackjack Mine is located in Section 14, Township 9 South, Range 35 East. The Site is in Grant County. The Site encompasses an area of approximately 5 acres and is located at an elevation of 4800 feet. The Site is moderately vegetated with large pines, brush, and meadow areas. Vegetation along the waste piles is much less than the rest of the Site, and absent on the waste rock pile.

- 1898 Site discovered by Timothy J. Sheedy.
  Seven claims established as: Blackjack, Senator, Constitution, Grey Rock, Osceola, Congress and Trade Dollars.
- 1903 Claims sold to Black Jack Gold Mining Company.
- 1903 Four new claims added to the above and were: Flaherty, Roosevelt, Calamut, and Sheedy. T. J. Sheedy was the superintendent of the Black Jack Gold Mining Company.
- 1903 1906 Moderate underground workings were developed. Total development was 3000 feet with cross cuts and raises, all on one level.
- 1915 T. J. Sheedy located the National Claim, once known as the Blackjack mine.

- 1915 to 1929 T. J. and T. W. Sheedy located the Congress, Banner, Gold Coin and Washington claims.
- $\bullet \quad$  1929 to 1936 T. J. and T. W. Sheedy maintained this Black Jack Group until the death of T. J. Sheedy
- 1936 to 1943 Katie Sheedy and a number of different partners maintained these claims
- 1943 The Blue Mountain Gold Dredge Company filed assessments on Katie's behalf.
- 1950 No other assessments filed after this year.

#### 2. Bluebird Mine

The Bluebird Mine is located in Section 11, Township 9 South, Range 35 East. The Site is in Grant County. The Site encompasses an area of approximately 2 acres and is located at an elevation of 4640 feet. The Site is moderately vegetated with large pines, brush.

- 1897 Site located by Ezra J. Thorpe
- 1897 to 1899 Six claims filed: Bluebird, T.T., Diana, Little Rock, Cross Lode, and Sullivan No. 3.
- 1898? Two mill sites located at Bluebird and T.T.
- 1903 Claims sold to the Blue Bird Mining Company.
- 1904 to 1905 \$5000 of gold was removed.
- 1931 Katie Sheedy and two partners filed the Cleveland lode-mining claim, formerly known as the Bluebird.
- 1931 to 1938 Katie Sheedy maintained these claims.
- 1938 Blue Mountain Gold Dredge Company filed assessment affidavits on Katie's behalf.
- 1950 no further affidavits filed.

#### **B.** Site Characteristics

The Blackjack and Bluebird mines are within the Granite Creek watershed and located along Clear Creek.

The Blackjack mine is approximately 150 feet above Clear Creek, situated in steep terrain. The waste rock material was dumped over the side and runs all the way down to Clear Creek. The site consists of two portals. The upper portal contains a bulkhead (installed in 1981 by the US Forest Service) and pipeline to drain the water from within the adit and discharges into a pond on the opposite side of Clear Creek. The pipeline is approximately 600 feet in length. The lower portal is partially caved and Acid Mine Drainage (AMD) is apparent and flowing out from the caved portal.

The Bluebird mine is situated approximately 40 feet above Clear Creek, situated in moderate to steep terrain. Blubird has has a land slide in recent times which took out the access road to the portal. This mine also has a pipeline and some form of bulkhead. It is suspected the bulkhead just consists of timbers and is basically a dam within the adit. The portal has been covered with soil, so access is not readily available.

### 1. Blackjack

Total volume of contaminated material is unknown at this time. However, a major concern is the clogging of the improper design of the pipeline which leads to maintenance problems and releases when the pipeline becomes clogged with iron precipitate.

## 2. Blue Ridge

Total volume of contaminated material is estimated at 300 to 500 cy. The highest concentration of arsenic was 65 mg/kg; antimony was 752 mg/kg; and iron was 1,400k mg/kg. These readings were recorded with a Niton XRF unit in the sludge material left behind when the internal dam was breached and released water into Clear Creek during an episode in 2001 when the pipeline became clogged.

Arsenic typically averages between 5 to 18 mg/kg in Oregon

# C. Release or Threatened Release into the Environment of a Hazardous Substance, Pollutant, or Contaminant

Abbreviated Preliminary Assessments (A Pas) have been completed and studies for the Site Inspection (SI) are currently being conducted for this Site. A PRP search is being conducted to determine if there are any viable parties to be held accountable for any cleanup action. The Forest Service is preparing to develop an SI and eventually an Engineering Evaluation/Cost Analysis (EE/CA) for the project Site. If the current project Site conditions persist, there is the potential for adverse chronic and acute health effects on human and wildlife entering the area, especially from releases as the pipeline fails from becoming clogged with precipitate..

#### D. Actions Taken on the Site

Recent actions taken at the Site include:

- 1. APA was completed by the Forest Service, 2003
- 2. SI is currently being conducted by EA.
- 3. PRP search has been initiated.

#### III. PROPOSED ACTIONS AND ESTIMATED COSTS

The proposed action for the Site is to initiate CERCLA. In compliance with the NCP, an SI and Engineering Evaluation/Cost Analysis (EE/CA) will be prepared. The EE/CA will review all sampling results, records of chemical usage, reasonable alternatives, ARARs, risk-based analysis of alternatives, cost of each alternative and will be used to select a preferred alternative based on these data.

The estimated cost for the replacement of the pipeline and installation of a bulkhead for Bluebird is \$300,000. At this time, it is unknown as to whether any additional removal action will be required in order to address the waste piles. Also, it appears the ponds are ineffective, so additional work will be required in order to make the ponds more efficient. Anticipated cost for this aspect of the project is \$100,000.

The estimated cost for the replacement of the pipeline, replacement of the existing bulkhead at the upper adit and installation of a new bulkhead at the lower adit is \$600,000.

### IV. ADMINISTRATIVE RECORD AND COMMUNITY RELATIONS

Pursuant to 40 CFR 300.415(m), I have designated Greg Visconty of the Wallowa-Whitman National Forest, as the On-Scene Coordinator and Greg Visconty for the Wallowa-Whitman National Forest as Spokesperson for the project.

A community Relations Plan will be developed for this project. The Administrative Record for any response action selected will be compiled and made available during regular business hours at the office of the Wallowa-Whitman National Forest, Baker City, Oregon. A Notice of Availability of the Administrative Record will be published in local newspapers.

### V. DECISION

By this Action Memorandum, I am initiating CERCLA at the Blackjack and Bluebird Mines as appropriate.

By copy of this Action Memorandum, we are formally notifying the State of Oregon and EPA Region X of our finding of the appropriateness of CERCLA at the Site.

Harv Forsgren Regional Forester Pacific Northwest Region

cc:

Oregon DEQ EPA